What is claimed is:

1. A vision system for a vehicle comprising:

a light source generating an illumination beam;

a receiver generating a first image signal and a second image signal, at least one of said first image signal and said second image signal being generated in response to at least a reflected portion of said illumination beam; and

a controller coupled to said light source and said receiver, said controller generating an image in response to said first image signal and said second image signal.

2. A system as in claim 1 wherein said light source is a non-incandescent light source.

3. A system as in claim 1 wherein said controller generates a fused image signal in response to said first image signal and said second image signal.

4. A system as in claim 3 wherein said controller in generating said fused image signal averages said first image signal and said second image signal.

5. A system as in claim 3 wherein said controller generates said fused image signal in response to at least one predetermined image intensity threshold.

6. A system as in claim 3 wherein said controller generates said fused image signal in response to a maximum image intensity threshold and a minimum image intensity threshold.

7. A system as in claim 1 wherein said receiver in generating a first image signal and a second image signal generates an illuminated image signal having pixel intensity values I_b and a non-illuminated image signal having pixel intensity values I_d.

8. A system as in claim 7 wherein said controller sets pixel intensity values of at least a portion of said image to be approximately equal to pixel intensity values of at least a portion of said illuminated image signal.

9. A system as in claim 7 wherein said controller generates said image in response to a maximum image intensity threshold $I_{b,\max}$ and a minimum image intensity threshold $I_{b,\min}$.

10. A system as in claim 9 wherein said controller determines pixel intensity values of at least a portion of said image to be approximately equal to $I_{avg} - \frac{(I_{b,\max} - I_b)(I_{avg} - I_{b,\min})}{\Delta}$, where average intensity values I_{avg} are approximately equal to $\frac{I_b + I_d}{2}$

and threshold difference Δ is approximately equal to $I_{b,\max} - I_{b,\min}$.

11. A system as in claim 7 wherein said controller sets pixel intensity of at least a portion of said image to be approximately equal average intensity values I_{avg} that is approximately equal to $\frac{I_b + I_d}{2}$.

12. A system as in claim 7 wherein said controller sets pixel intensity values of at least a portion of said image to be approximately equal to pixel intensity values of at least a portion of said non-illuminated image signal.

13. A system as in claim 7 wherein said controller determines pixel intensity values of at least a portion of said image to be approximately equal to $\frac{I_b}{1+\frac{(I_b - I_d)}{\beta}}$, where β is a predetermined value.

14. A system as in claim 1 further comprising a timing device generating a time signal, said controller operating said light source and said receiver in response to said time signal.

15. A system as in claim 1 comprising an object detection sensor generating an object detection signal, said controller operating said

light source and said receiver in response to said object detection signal.

16. A system as in claim 1 further comprising a heading device generating a heading signal, said controller operating said light source and said receiver in response to said heading signal.

17. A system as in claim 1 wherein said controller in generating said image utilizes an extrapolated contour line algorithm.

18. A method of forming an image within an imaging system comprising:

generating an illumination beam;

generating a first image signal and a second image signal, at least one of said first image signal and said second image signal being generated in response to at least a reflected portion of said illumination beam; and

generating an image in response to said first image signal and said second image signal.

19. A method as in claim 18 wherein generating an image comprises generating a fused image signal in response to said first image signal and said second image signal.

20. A vision system for a vehicle comprising:

a light source generating an illumination beam;

a receiver generating an illuminated image signal and a non-illuminated image signal, said illuminated image signal being generated in response to at least a reflected portion of said illumination beam and said non-illuminated image signal being generated when said light source is in a low illumination state; and

a controller coupled to said light source and said receiver, said controller generating a fused image signal in response to said illuminated image signal and said non-illuminated image signal.